



RIDOT TMC Unplanned Incident Statistics and Performance Measures 1/1/2009 To 3/31/2009

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is part of our ongoing Performance Measurement effort. Through this effort, we are quantifying the benefits of the ITS program in our state, and are also able to monitor improvements in the efficiency and effectiveness with which we manage roadway incidents. By making these statistics available to you on a monthly basis, we hope that you can learn more about the program and understand the benefit of the service we provide to the Rhode Island motoring public.

These monthly reports represent statistics for unplanned incidents on Rhode Island's roadways. The types of incidents included in the report include disabled vehicles, debris on the roadway, emergency roadwork, and vehicle accidents, including jack-knifed trucks and vehicle spinouts. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

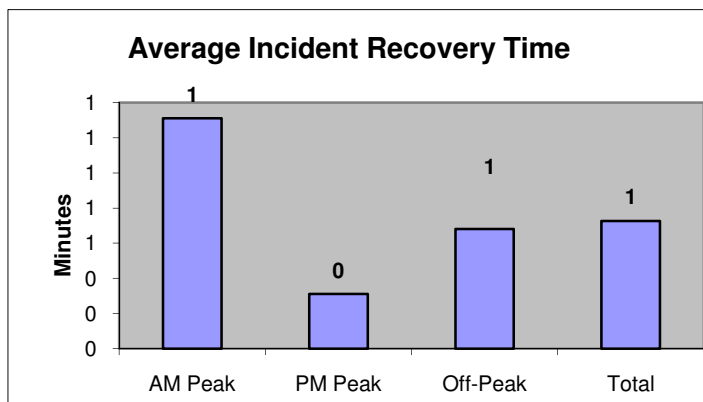
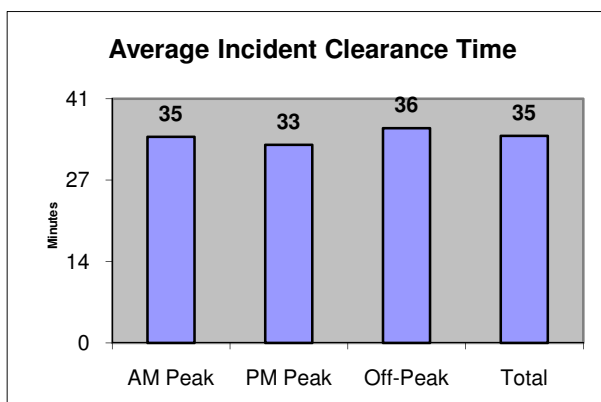
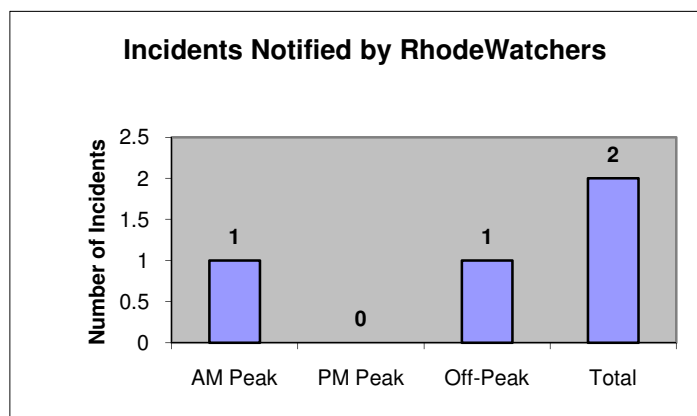
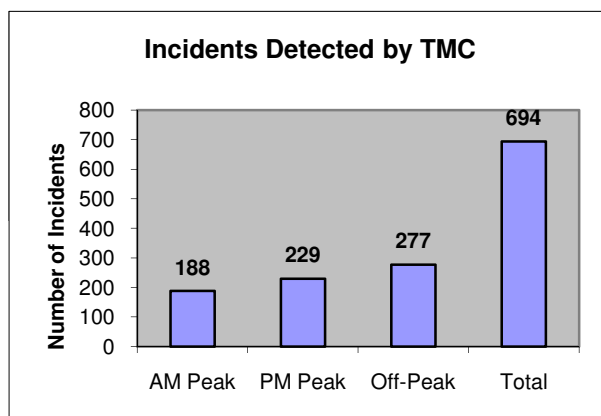
RIDOT TMC Unplanned Incident Statistics and Performance Measures Report

1. Peak Period Incident Statistics*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	193	238	295	726
Avg. Incident Duration (hr:min)	36	34	37	36
Avg. Incident Clearance Time (hr:min)	35	33	36	35
Avg. Incident Recovery Time (hr:min)	1	0	1	1
# Detected by TMC Operators (CCVE)	73	73	145	291
# Detected by TMC, State Police	115	156	132	403
# Notified by RhodeWatchers	1	0	1	2
# of Messages Posted VMS	12	18	26	56
# of Messages Posted DMS	73	93	135	301
# of Messages Posted HAR	36	21	74	131
# of Messages posted Web	177	225	268	670
Avg. Delay Cost**	\$152,390	\$142,487	\$156,080	\$150,643
Total Delay Cost	\$29,411,175	\$33,911,891	\$46,043,527	\$109,366,593

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

** Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

Incident Clearance Time is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

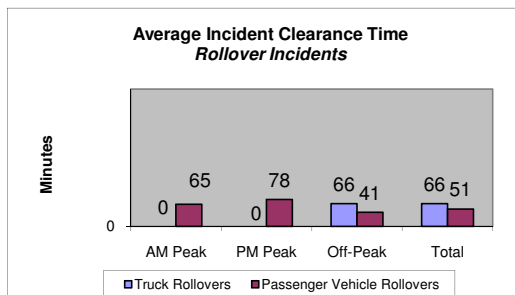
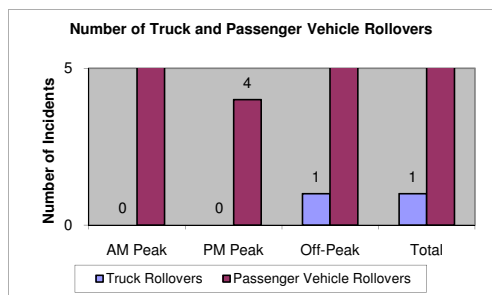
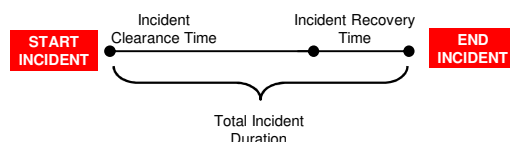
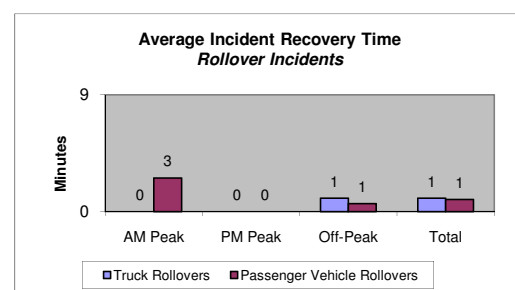
Incident Recovery Time is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.



2. Rollover Incident Statistics*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	0	0	1	1	6	4	20	30
Avg. Incident Duration (min)	0	0	67	67	68	78	42	52
Avg. Incident Clearance Time (min)	0	0	66	66	65	78	41	51
Avg. Incident Recovery Time (min)	0	0	1	1	3	0	1	1

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

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3. Incidents by Severity Level

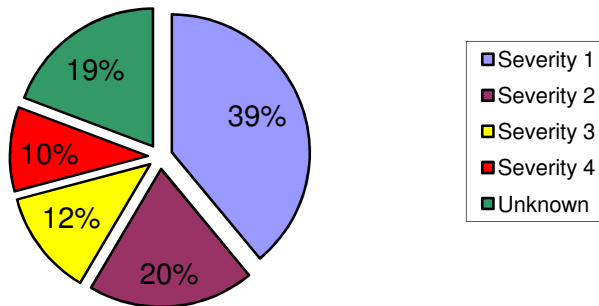
Severity Level*	No. of Incidents
Severity 0	290
Severity 1	170
Severity 2	85
Severity 3	54
Severity 4	43
Unknown	84
Total	726

Number of Incidents with a Secondary Incident:

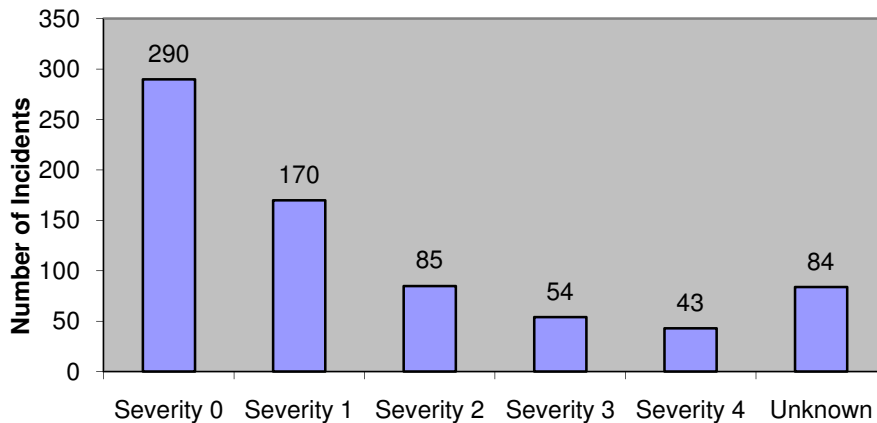
Percentage of Incidents with a Secondary Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

Percent of Incidents by Severity Level



Number of Incidents by Severity Level



*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR Hazmat w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

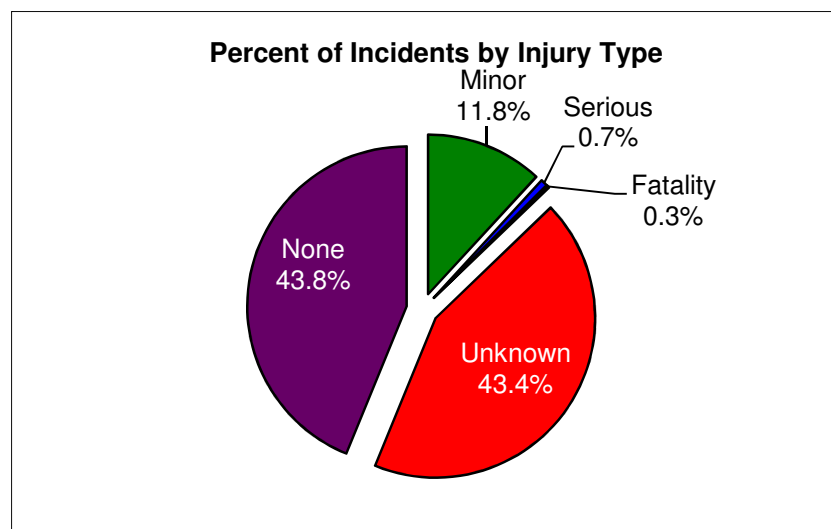
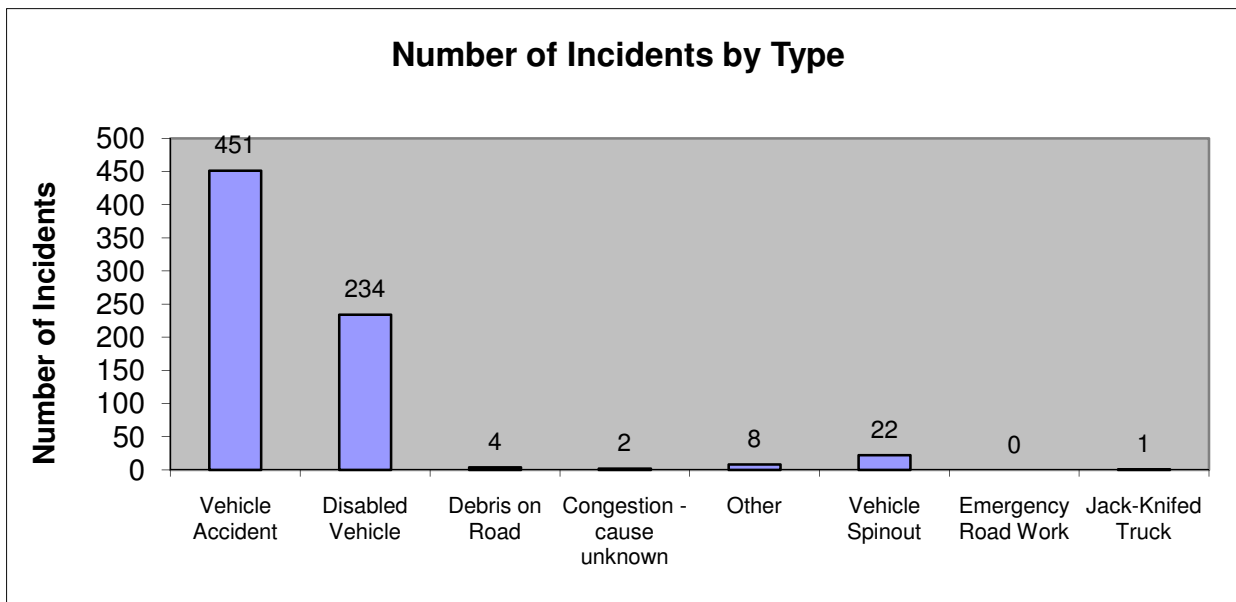


4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	451
Disabled Vehicle	234
Debris on Road	4
Congestion - cause unknown	2
Other	8
Vehicle Spinout	22
Emergency Road Work	0
Jack-Knifed Truck	1
<i>Total Number of Incidents</i>	<i>722</i>

5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	86
Serious	5
Fatality	2
Unknown	315
None	318
<i>Total</i>	<i>726</i>



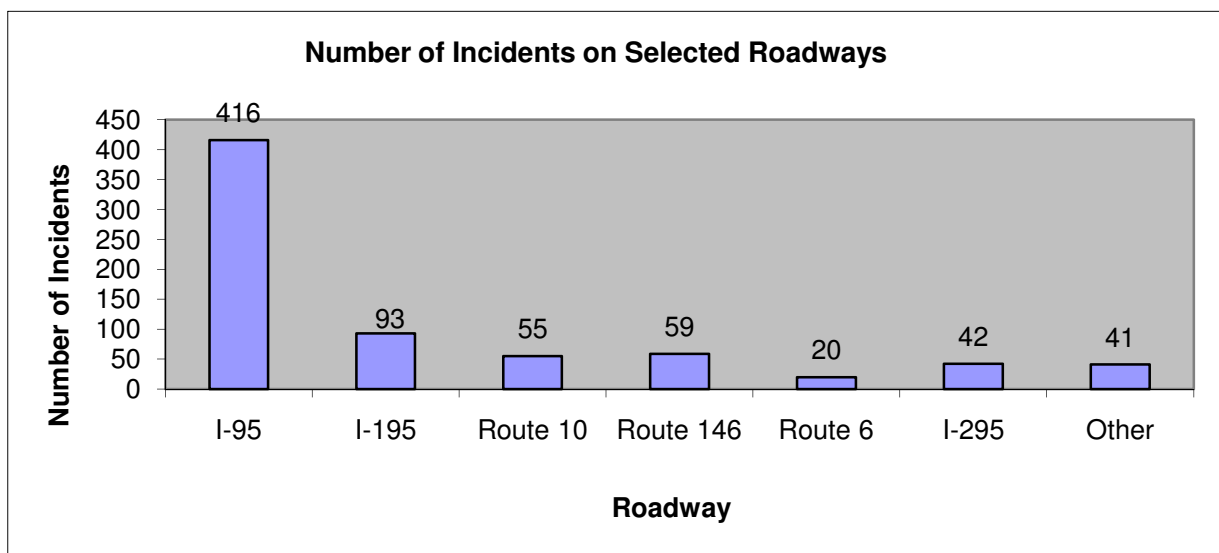
6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	515
Wet	119
Icy	27
Snow-Covered	65
Flooded	0
Other	0
<i>Total</i>	<i>726</i>
Precipitation	
None	595
Light-moderate rain falling	66
Heavy rain falling	2
Light-moderate sleet falling	5
Heavy sleet falling	2
Light-moderate snow falling	44
Heavy snow falling	12
<i>Total</i>	<i>726</i>
Wind	
Calm to Moderate	671
Moderate to Strong	53
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	0
N/A	2
<i>Total</i>	<i>726</i>
Visibility	
Clear	606
Light fog	12
Dense fog	10
Reduced- rain	42
Reduced-snow	37
Poor-heavy rain/sleet	1
Poor-heavy snow	13
Reduced-smoke	0
Other	1
N/A	4
<i>Total</i>	<i>726</i>

7. Incidents Detected by Primary Notifier on Selected Roadways

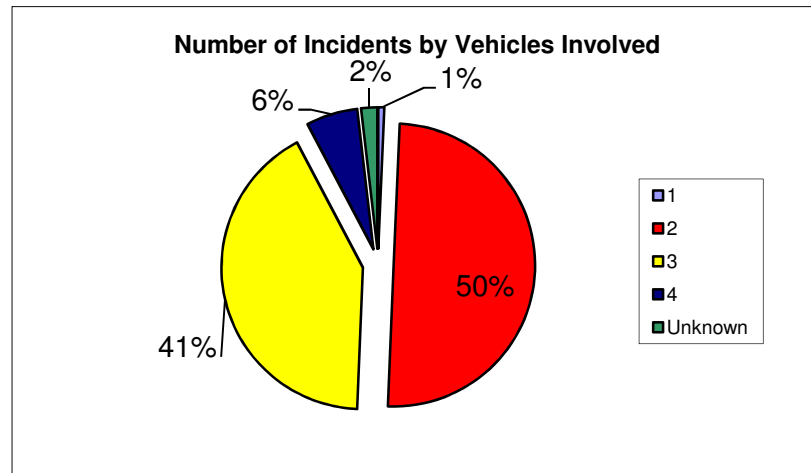
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	43
	State Police Scanner	13
	Local Fire Department	1
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	1
	TMC State Police	0
	Transcom	0
	Other	34
	Total	93
I-95	TMC Operator	192
	State Police Scanner	82
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	1
	Other	140
	Total	416
I-295	TMC Operator	5
	State Police Scanner	19
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	18
	Total	42

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	22
	State Police Scanner	13
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	20
	Total	55
Route 146	TMC Operator	17
	State Police Scanner	13
	Local Fire Department	2
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	27
	Total	59
Route 6	TMC Operator	6
	State Police Scanner	6
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	8
	Total	20



8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	5
2	356
3	297
4	42
5	11
6	2
7	0
8	0
9	0
10+	0
Unknown	13
Total Incidents	726

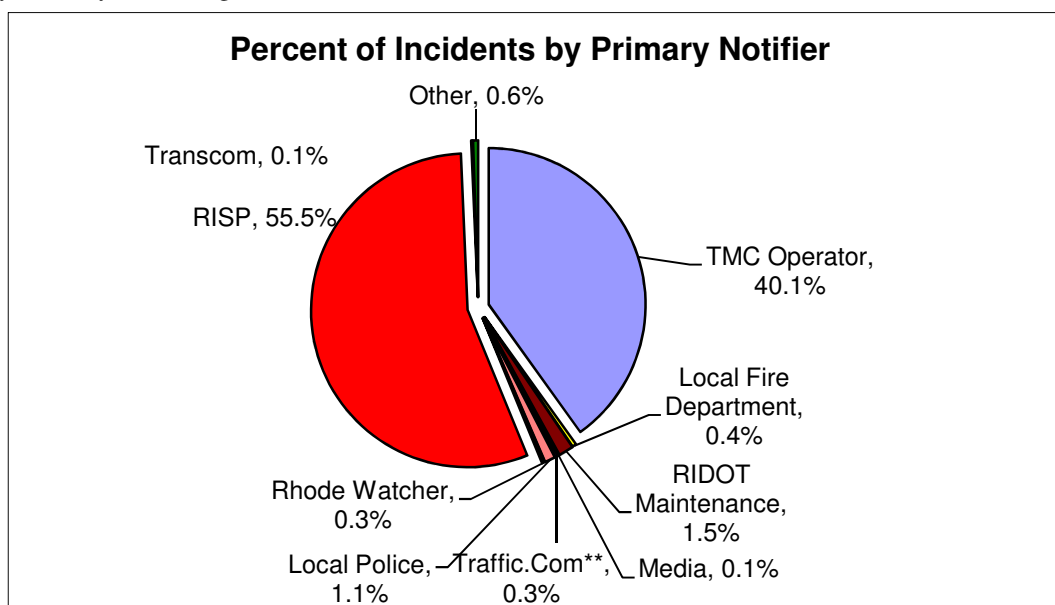


9. Incident Notification

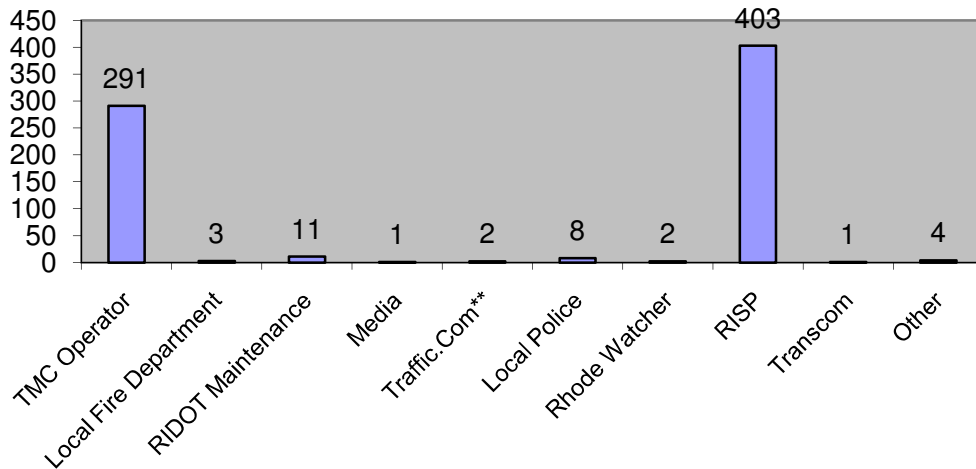
Primary Notifier*	No. of Incidents
TMC Operator	291
Local Fire Department	3
RIDOT Maintenance	11
Media	1
Traffic.Com**	2
Local Police	8
Rhode Watcher	2
RISP	403
Transcom	1
Other	4
Total	726

*First notifier of the incident to TMC

**Formerly Mobility Technologies



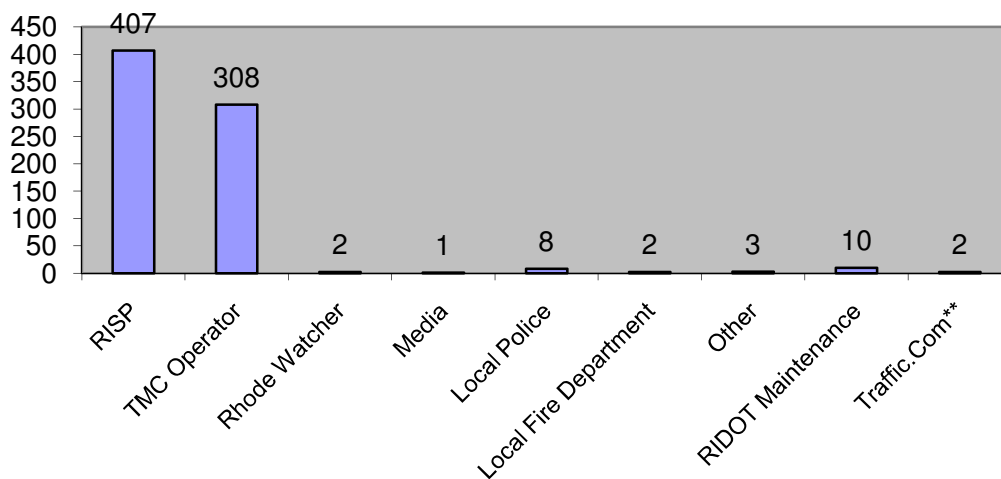
Number of Incidents by Primary Notifier



Notifier	No. of Incidents
RISP	407
TMC Operator	308
Rhode Watcher	2
Media	1
Local Police	8
Local Fire Department	2
Other	3
RIDOT Maintenance	10
Traffic.Com**	2
Transcom	1

Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".

Number of Incidents by All Notifiers



10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	574	79.06%
Tow	253	34.85%
Local Fire Department	154	21.21%
EMS	144	19.83%
Local Police	56	7.71%
Service Patrol	28	3.86%
Mass Highway	0	0.00%
DOT	13	1.79%
Hazmat	0	0.00%
DEM	0	0.00%
Connecticut DOT	0	0.00%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	347
# of VMS Messages	56
# of DMS Messages	301
# of HAR Messages	131
# of Web Messages	670

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

